This listing of claims will replace all prior versions, and listings, of claims in the application.

CLAIMS

1. (Currently Amended) Decoding method of a picture sequence coded with spatial and temporal scalability, the coded data comprising motion information, the method comprising a spatial synthesis step that is followed by a hierarchical temporal synthesis step carrying out a motion compensated temporal filtering, or MCTF, of pictures at a frequency decomposition level of the motion information, to provide pictures at a lower decomposition level, wherein the hierarchical temporal synthesis step comprises a motion estimation step using spatial interpolation filters and wherein, during a motion compensated temporal filtering operation, the resolution chosen for the use of the motion information and the number of coefficients of the spatial interpolation filters used for the motion estimation are controlled by a motion configuration choice circuit and depend on a decoding scenario, wherein the decoding scenario depends at least on a spatial resolution selected for the decoding and a bit-rate selected for the decoding.

2. (Cancelled)

3. (Currently Amended) Method according to claim 1, wherein the hierarchical temporal synthesis step is a decoding of wavelet coefficients with motion compensated filtering, wherein the wavelet coefficients are obtained in said spatial synthesis step.

4. (Currently Amended) Coding method of a picture sequence of a given spatial resolution, with spatial and temporal scalability, comprising a hierarchical temporal analysis step and a subsequent spatial analysis step, the hierarchical temporal analysis step carrying out a motion compensated temporal filtering, or MCTF, of pictures at a frequency decomposition level, from motion information obtained by a motion estimation step

performed between these pictures, to provide pictures at a higher decomposition level, wherein, during a motion compensated temporal filtering operation, the resolution chosen for the use of the motion information and the number of coefficients of the interpolation filters used depends at least upon the given spatial resolution of the source pictures, and wherein said motion estimation step comprises a first motion configuration choice for determining operating conditions of the motion estimation according to different decomposition levels of pictures received from the hierarchical temporal analysis step, and wherein said hierarchical temporal analysis step comprises performing a motion compensation and further comprises performing a second motion configuration choice for determining a configuration of said motion compensation according to the decomposition levels of the pictures or said given spatial resolution.

5. (Previously Presented) Method according to claim 4, wherein said step of motion estimation is computed between two pictures at a given level of decomposition to perform the motion compensation and wherein the operating conditions of the motion estimation comprise a computation accuracy.

6. (Previously Presented) Method according to claim 4, wherein the hierarchical temporal analysis step is a wavelet coding with motion compensated filtering.

7. (Currently Amended) Decoder for the implementation of the method according to claim 1, comprising a spatial synthesis block for receiving picture data from an entropy decoding block, a temporal synthesis block for receiving picture data from the spatial synthesis block and a temporal filter switching block for providing control data to the temporal synthesis block, wherein the temporal synthesis block comprises a motion configuration choice circuit to determine the motion resolution and a number of coefficients used by the interpolation filter to use in the motion compensation for the motion compensated filtering, depending on a decoding scenario, wherein the decoding scenario depends on at least a spatial resolution selected for the decoding and a bit-rate selected for the decoding.

8. (Previously Presented) Coder for the implementation of the method according to claim 4, comprising a first motion configuration choice circuit to determine the interpolation filter to be used by a temporal analysis circuit for the motion compensation.

9. (Previously Presented) Coder for the implementation of the method according to claim 4, comprising a second motion configuration choice circuit to determine the accuracy of the motion computed by the motion estimation circuit.

10. (Previously Presented) The decoder according to claim 7, wherein the number of coefficients used by the interpolation filter for motion compensation depends also on the temporal decomposition level.

11. (Previously Presented) The decoder according to claim 7, wherein the hierarchical temporal synthesis block comprises a motion compensation filter for decoding wavelet coefficients.

12. (New) The decoding method according to claim 1, wherein the decoding scenario depends also on the temporal decomposition level.